



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,251	06/05/2001	Shuji Harashima	209467US2S	5977

22850 7590 12/22/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN BA, PAUL H

ART UNIT	PAPER NUMBER
----------	--------------

2176

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/873,251	<b>Applicant(s)</b> HARASHIMA ET AL.	
	<b>Examiner</b> Paul Nguyen-Ba	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/23/2004</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Notice to Applicant***

1. This action is responsive to Information Disclosure Statement filed on March 23, 2004.
2. Claims 1-14 have been considered. Claims 1, 4, 5, 8, 9, 10, 12, and 13 are independent claims.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 5-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims need to be directed towards a "computer-implemented"

Art Unit: 2176

method. The language of the claim raises a question as to whether the claim is directed merely toward a computer program that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. §101. "Computer-readable" read in its broadest sense does not exclude the use of signal processing or carrier waves.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta et al. ("Gupta"), U.S. Patent No. 6,233,585.

Art Unit: 2176

**Claims 1, 2, and 5-8**

Gupta teaches a program executing management system and computer readable computer program (see Abstract → i.e. transaction system) comprising:

*a processing element definition unit for storing, for each identification information of a process which sequentially uses a plurality of processing elements (i.e. “subtransaction”), the identification information and execution order of a plurality of processing elements used in the process (see col. 6 lines 20-29; col. 7 lines 15-51; col. 8 lines 39-43; col. 11 lines 40-61 → i.e. “saga service”);*

*a recovery processing element definition unit for storing the identification information of a recovery processing element to be executed when abnormality occurs, for each identification information of the plurality of processing elements (see col. 3 lines 13-14; col. 6 lines 12-19, 41-42; col. 7 lines 56-60 → “persistent service” may be invoked to maintain a listing of the subtransaction steps performed as well as the state of any objects) (see also col. 7 lines 27-34 → a one to one mapping of subtransactions and compensating transactions may exist) (see further col. 6 lines 30-44; col. 11 lines 62 et seq. → i.e. “recover service”);*

*an executing unit for referring to said processing element definition unit to obtain the identification information of a processing element to be processed next, on the basis of a processing element use request from the process, and executing the processing element corresponding to the obtained identification information (see col. 7 lines 24-51; col. 8 lines 39-43 → i.e. “saga”); and*

*a recovery executing unit for, when an abnormality occurs during execution of a processing element by said executing unit, referring to said recovery processing element*

Art Unit: 2176

*definition unit on the basis of the identification information of the processing element which has caused the abnormality, and executing a recovery processing element corresponding to the abnormality (see col. 6 lines 30-44; col. 11 lines 62 et seq. → i.e. “recover service”).*

### **Claim 3**

*Gupta teaches a number issuing unit for...issuing a unique number corresponding to the execution request, wherein said executing unit identifies...executes the processing element corresponding to the obtained identification information (see col. 7 lines 15-34; col. 11 lines 14-18); see also Figs. 2 and 3a).*

### **Claim 4**

*Gupta teaches a processing element definition unit for storing, for each identification information of a process which sequentially uses a plurality of processing elements (i.e. “subtransaction”), the identification information and execution order of a plurality of processing elements used in the process (see col. 6 lines 20-29; col. 7 lines 15-51; col. 8 lines 39-43; col. 11 lines 40-61 → i.e. “saga service”);*

*a recovery processing element definition unit for storing the identification information of a recovery processing element to be executed when abnormality occurs, for each identification information of the plurality of processing elements (see col. 3 lines 13-14; col. 6 lines 12-19, 41-42; col. 7 lines 56-60 → “persistent service” may be invoked to maintain a listing of the subtransaction steps performed as well as the state of any objects) (see also col. 7 lines 27-34 → a one to one mapping of subtransactions and compensating transactions may exist) (see further col. 6 lines 30-44; col. 11 lines 62 et seq. → i.e. “recover service”);*

*an executing unit for, when an execution request for the process is generated, referring to said processing element definition unit on the basis of the identification information of the process, and sequentially executing a plurality of processing elements corresponding to the identification information of the process in the execution order of the elements; (see col. 7 lines 24-51; col. 8 lines 39-43 → i.e. “saga”); and*

*a recovery executing unit for, when an abnormality occurs during execution of a processing element by said executing unit, referring to said recovery processing element definition unit on the basis of the identification information of the processing element which has caused the abnormality, and executing a recovery processing element corresponding to the abnormality (see col. 6 lines 30-44; col. 11 lines 62 et seq. → i.e. “recover service”).*

#### **Claim 9**

With respect to claim 9, please refer to the rationale relied upon to reject claim 1. Furthermore, Gupta teaches *a result notification code for notifying the process of the result of execution of a processing element by said executing code* (see col. 8 lines 46-67 et seq.; see also col. 6 lines 11-19; col. 7 lines 57-60).

#### **Claim 10**

Gupta teaches *an input code for inputting the identification information of a process which sequentially executes a plurality of reusable processing elements, the identification information of a plurality of processing elements used in the process, and the execution order of the plurality of processing elements* (see col. 7 lines 34-37 → the content creation (i.e. “saga”) for compensating transactions is left to the developer of the business logic); and

*a definition code for storing, for each identification information of the process, the identification information of a plurality of processing elements used in the process, and the execution order of a plurality of processing elements used in the process* (see col. 6 lines 20-29; col. 7 lines 15-51; col. 8 lines 39-43; col. 11 lines 40-61 → i.e. “saga service”) (see also col. 3 lines 13-14; col. 6 lines 12-19, 41-42; col. 7 lines 56-60 → “persistent service” may be invoked to maintain a listing of the subtransaction steps performed as well as the state of any objects).

### **Claims 11 and 12**

With respect to claims 11 and 12, please refer to the rationale relied upon to reject claim 8. Furthermore, Gupta teaches *a result notification code for notifying the process of the result of execution of a processing element by said executing code* (see col. 8 lines 46-67 *et seq.*; see also col. 6 lines 11-19; col. 7 lines 57-60).

### **Claim 13**

Gupta teaches the *input step of inputting the identification information of a process which sequentially executes a plurality of reusable processing elements, the identification information of a plurality of processing elements used in the process, and the execution order of the plurality of processing elements* (see col. 7 lines 34-37 → the content creation (i.e. “saga”) for compensating transactions is left to the developer of the business logic); and

*the definition step of storing, for each identification information of the process, the identification information of a plurality of processing elements used in the process, and the execution order used in the of a plurality of processing elements process* (see col. 6 lines 20-29; col. 7 lines 15-51; col. 8 lines 39-43; col. 11 lines 40-61 → i.e. “saga service”).



Art Unit: 2176

#### **Claim 14**

Gupta teaches *the executing step of, when the identification information of a process to be executed is input, referring to the contents defined in the definition step, and executing a processing element corresponding to the input identification information of the process in an execution order corresponding to the input identification information of the process* (see col. 7 lines 24-51; col. 8 lines 39-43 → i.e. “saga”);

*and the result notification step of notifying the process of the execution result of a processing element obtained in the execution step* (see col. 8 lines 46-67 *et seq.*; see also col. 6 lines 11-19; col. 7 lines 57-60).

#### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (571) 272-4094. The examiner can normally be reached from 10:30 am - 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2176

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER